

L 13219-65 EWT(m)/EFT(c)/EWP(j) P-4/Pr-4 DIAAP/SSD/AFWL/AFTC(p)/ESD(t)
DM/RM

ACCESSION NR: AP4047418

S/0089/64/017/004/0303/0304

AUTHORS: Yurova, L. N.; Polyakov, A. A.; Ignatov, A. A.

TITLE: Neutron age in the fission of U-235 in monoisopropyl diphenyl and in iron-diphenyl and aluminum-diphenyl mixtures

SOURCE: Atomnaya energiya, v. 17, no. 4, 1964, 303-304

TOPIC TAGS: neutron age, uranium fission, organic moderator, homogeneous moderator, inhomogeneous moderator, neutron density distribution, diffusion length

ABSTRACT: The work was done in a thermal column of the heavy water reactor of AN SSSR in 1960 as part of a program of research on the moderating and diffusion properties of hydrogen-containing media. The age of neutrons produced by moderating U²³⁵ fission neutrons in monoisopropyl diphenyl (C₁₅H₁₆) was measured with an indium detector. The moderated-neutron distribution near the source was measured with

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a target consisting of indium foils. The neutron density distributions along the axis of the stainless steel tank (41 cm diameter 110 cm long) placed in the thermal column of the reactor were measured for the following cases: a) "small" (pointlike) source, target thickness 1.8 mm, diameter 20 mm; b) "small" (pointlike) source, target thickness 0.3 mm, diameter 20 mm; c) "large" source, target thickness 0.3 mm, diameter 50 mm. The plotted distribution of the neutrons with energy 1.46 eV produced after moderation was used to calculate the neutron age. The value obtained experimentally was $42.7 \pm 1.8 \text{ cm}^2$, which agrees well with the 43.4 cm^2 calculated by V. P. Kochergin and V. V. Orlov (Atomnaya energiya v. 6, 34, 1959), and with 43.4 cm^2 obtained by multi-group computer calculations made at the Fiziko-energeticheskii institut. The thermal-neutron density distribution yielded for the diffusion length of the neutrons a value $3.71 \pm 0.03 \text{ cm}$. An analogous procedure was used to measure the age of neutrons moderated in mixtures of diphenyl and iron and diphenyl and aluminum. For the diphenyl-iron (25% by volume) mixture the age was found to be

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75.0 $\pm$ 4.4 cm², while for diphenyl-aluminum (20% volume) -- 87.8 $\pm$ 2.3 cm². This compares with 65.6 and 71.7 cm² obtained by Kocher-gin and Orlov and with 68.5 and 79.9 cm² obtained by the multi-group calculation. The corresponding diffusion lengths are 2.63 $\pm$ 0.04 and 11.19 $\pm$ 0.82 cm. The greater deviation in the case of moderator mixtures indicates that the heterogeneity of the medium must be taken into account in theoretical studies of moderation of neutrons in mixtures of hydrogen-containing compounds and metals. Orig. art. has: 1 figure and 2 formulas.

ASSOCIATION: None

SUBMITTED: 08Oct63

ENCL: 00

SUB CODE: NP

NR REF SOV: 006

OTHER: 001

Card 3/3

POLYAKOV, A.A., prof.; KRASNOSHCHIEKOV, V.A., aspirant

Veterinary hygiene and disinfection in swine erysipelas. Veteri-
naria 40 no.2:59-64 F '63. (MIRA 17'2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut veterinarnoy
sanitarii.

POLYAKOV, A.A., aspirant

Organization of the transportation of mineral fertilizers.
Nauch.trudy KHIIT no.55:88-96 '62. (MIRA 16:10)

YUROVA, L.N.; POLYAKOV, A.A.; IGNATOV, A.A.

Age of fission neutrons in water. Nek. vop. inzh. fiz. no.4:
43-46 '63. (MIRA 16:8)

(Neutron sources)

POLYAKOV, Aleksandr Afanas'yevich; KULIKOV, V.N., red.;
NOVOSELOVA, V.V., tekhn. red.

[Training exercises in a machine shop; manual for teachers
and pupils] Zaniatiia v slesarno-mekhanicheskoi masterskoi;
posobie dlia uchitelei i uchashchikhsia. Moskva, Izd-vo
Akad. pedagog. nauk RSFSR, 1963. 159 p. (MIRA 17:3)

FEDOROV, S.A., ~~doktor tekhn. nauk~~; SIMANOV, V.G., gornyy inzh.;
RUKHLOV, V.A., ~~gornyy inzh.~~; POLYAKOV, A.A., gornyy inzh.

Air space as a means of controlling the effects of blasting.
Vzryv. delo no.54/11:153-157 '64. (MIRA 17:9)

1. Sverdlovskiy gornyy institut.

DEMENT'YEV, G.Ya., inzh.; POLYAKOV, A.B., dotsent; YAROSH, A.Ya., dotsent

Results of gravimetric studies in pyritic copper deposits. Izv.
vys. ucheb. zav.; gor. zhur. 5 no.3:3-8 '62. (MIRA 15:7)

1. Sverdlovskiy gornyy institut imeni V.V. Vakhrusheva.
Rekomendovana kafedroy geofiziki Sverdlovskogo gornogo instituta.
(Chalcopyrite)
(Gravity prospecting)

POLYAKOV, A.B.; TAVRIN, I.F.; AUE, L.F.

Improved method for gravimetric surveying. Trudy Sver. gor. inst.
no.30:39-46 '57. (MIRA 11:4)

(Prospecting--Geophysical methods)

YAROSH, A.Ya.; ANSIMOV, K.N.; POLYAKOV, A.B.

Using gravitational prospecting for studying deep pyrite layers.
Trudy Sver. gor. inst. no.30:55-63 '57. (MIRA 11:4)
(Ural Mountains—Pyrites) (Prospecting—Geophysical methods)

POLYAKOV, A.B., Cand Geol-Min Sci -- (diss) "Direction of the
prospecting ^{operations} ~~for coal~~ on the eastern ^{slope} ~~side~~ of the Northern and
Central Ural^s and methods of interpretation of the results of a
gravitation ^{photo} ~~survey~~." Sverdlovsk, 1959. 15 pp (Min of Higher
Education USSR. Sverdlovsk Mining Institute in V.V. Valdhrushev).
100 copies (ML, 39-59, 102)

23

S/169/62/000/009/039/120
D228/D307

AUTHORS: Dement'yev, G. Ya., Polyakov, A. B. and Yarosh, A. Ya.

TITLE: Results of gravimetric investigations of a copper pyrite deposit

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 9, 1962, 35, abstract 9A232 (Izv. vyssh. uchebn. zavedeniy, Gorn. zh., no. 3, 1962, 3-8)

TEXT: The question of the possibility of applying gravimetry to seek and explore copper pyrite deposits is analyzed. The method's prerequisites are given, and an example is cited for the use of gravimetry in a deposit, characterized by gently lying lodes. It is concluded that the Δg anomalies over such lodes are completely adequate for their detection. Even comparatively small lodes can be detected at depths of 100 - 120 m, while large ones can be discovered at depths of several hundred meters. In order to distinguish weak anomalies due to small or deep-lying orebodies, it is recommended that the measurement precision should be increased, and also

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Results of gravimetric ...

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D228/D307

that different kinds of interference should be taken into account and eliminated. The article is illustrated by graphs of Δg and by an isoanomaly map. /_Abstracter's note: Complete translation._/

Card 2/2

YAROSH, Andrey Yakovlevich; POLYAKOV, Aleksandr Borisovich;
CHUMAKOV, F.N., red.izd-va; BYKOVA, V.V., tekhn.red.

[Gravity prospecting for copper pyrite deposits in the
Ural Mountains] Poiski i razvedka mednokolchedannykh
mestorozhdenii na Urale gravitatsionnym metodom. Mo-
skva, Gosgeoltekhizdat, 1963. 129 p. (MIRA 17:2)

KASPAROV, G.N., inzh.; POLYAKOV, A.F., kand.tekhn.nauk; SHAPOVALOV, Ye.N.,
inzh.

Spectrophotometric study of the ripening of perfumery liquids.
Masl.-zhir.prom. 29 no.11:33-36 N '63. (MIRA 16:12)

1. Krasnodarskaya parfyumernaya fabrika (for Kasparov). 2. Krasno-
darskiy politekhnicheskiy institut (for Polyakov, Shapovalov).

MOLOTKOV, P.I.; POLYAKOV, A.F.

Method of studying damages to soil caused by clear cuttings
and following erosion processes in mountain forests.

Pochrovedenie no.8:87-91 Ag '60. (MIRA 13:8)

1. Ukrainskiy nauchno-issledovatel'skiy institut lesnogo
khozjajstva i agrolesomelioratsii.
(Forest soils) (Erosion)

3 (7)

AUTHOR:

Polyakov, A. F.

SOV/50-59-8-7/19

TITLE:

On the Causes of the Intensification of Landslides in the Carpathians (O prichinakh intensifikatsii selevykh yavleniy v Karpatakh)

PERIODICAL:

Meteorologiya i gidrologiya, 1959, Nr 8, pp 27 - 29 (USSR)

ABSTRACT:

The landslides in the zone of the Soviet Carpathians were recorded in recent years. For example, Sribnyy (Ref 2) and Onufriyenko (Ref 1) report on this subject. The floods on December 14, 1957 were especially large in extension. While formerly such phenomena in the Carpathians had a local character, they have occurred regularly in recent years. The Czecho-Slovakian investigators (Refs 3, 4, 5, 6, 7) found that the unsatisfactory state of the mountain forests, and the absence of soil protection in the drainage areas, are the principal causes for the high-water landslides in the mountains. The investigations of the author confirm this opinion. 80% of the surface of forests to be felled are felled continuously, and the principal type of timber transport is an uncontrolled sliding over the ground downhill. This effects that the ground cover is removed at 60-90%, which causes an irregular water

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On the Causes of the Intensification of Landslides SOV/50-59-8-7/19
in the Carpathians

discharge. Table 1 shows the state of the ground surface in areas with continuous felling and different types of timber transport. The soil erosion on the slopes can be divided into one caused by operation and one caused by water. Both these kinds, and the damages connected with them, are pointed out here for the Carpathians. The data put forward distinctly show that, due to extensive wood felling on the slopes of the Carpathians, the landslides in forest areas increase. The statistic data show that 5 floods have been observed in the last years in those drainage areas where extensive wood fellings took place. There are 1 figure, 1 table, and 7 references, 2 of which are Soviet.

Card 2/2

POLYAKOV, A.F.

USSR.

Determination of linalool by a dehydration method in a sealed ampul. A. F. Polyakov and N. A. Turysheva. *Masloboina-Zhirovaya Prom.* 20, No. 3, 23-5 (1955).—An improved method is described for detg. linalool and preventing side reactions, namely, sulfuration and dehydrogenation. Weigh 10–20 mg. of 50% H_2SO_4 soln. and 1–2 g. of oil into 10 mm. wide and 100 mm. long ampul, seal the ampul and heat gradually in an oil bath at 150–200° (15–20 min.), cool to about room temp., shaking vigorously during this time, and centrifuge for 2–3 min. Open the ampul and place inverted into a specially designed capillary tube trap. Centrifuge the ampul and the capillary tube trap together and measure the vol. of transferred and sepd. water column in the trap. Compute the linalool content by means of the following equation: $AM/100/18 S$, where A is the wt. of water formed in the trap, M , the mol. wt. of linalool (154), and S the wt. of the sample; $A = Vd - e$, where V is the vol. of H_2SO_4 water soln. in the trap at 20°, d the d. of the soln., and e the wt. of H_2SO_4 used. V. N. K.

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POLYAKOV, A.F., inzh. (Rossosh, Voronezhskoy oblasti)

Repair of a needle valve. Energetik. 13 no.7:19 JI '65.

(MIRA 18:8)

POLYAKOV, H. G.																									
14																									
Deodorizing water in army camps at the front. A. G. Polyakov, O. G. Zhdanova and M. P. Asmolova. <i>Soviet. Zdravookhraneniye Tashkent</i> 1942, No. 2, 22-5.—Odors due to putrefaction of plant material in water can be partially removed by (a) adding 3-5 drops of 1:1000 KMnO_4 soln. per 100 cc. of water, letting stand 1 hr., and treating with NaOH soln., then with Ca(OH)_2 soln. to alk. reaction, or (b) boiling the water with permanganate for 15 min. (adding the KMnO_4 soln. dropwise until a pink color persists) and on cooling adding Ca(OH)_2 soln. until the ppt. of MnO_2 appears. Odor from putrefaction of animal waste matter cannot be removed by permanganate. Powd. charcoal (1 g. per l. of water) completely removes odors of plant origin in 15-20 min.; animal odors are not completely eliminated. Other methods were found unsatisfactory. C. S. Shapiro																									
ASAC-SLA INTELLIGENCE LITERATURE CLASSIFICATION																									
SEARCHED INDEXED SERIALIZED FILED																									

POLYAKOV, A.G., inzh.-podpolkovnik

Automobile drivers strive to have no accidents. Vest.protivovozd.
obor. no.9:15-17 S '61. (MIRA 14:8)
(Traffic safety)

L 41319-66 EWT(m)/ENP(t)/ETI IJP(c) JD/JG

ACC NR: AP6019605 (A, V) SOURCE CODE: UR/0048/66/030/002/0194/0197

AUTHOR: Berlovich, E.Ye.; Golovin, V.V.; Polyakov, A.G.; Khodzhayev, M.; Khaydarov, T.

ORG: none

TITLE: Lifetime of the first excited state of Sm^{149} /Report, Fifteenth Annual Conference on Nuclear Spectroscopy and Nuclear Structure, held at Minsk, 25 Jan. to 2 Feb. 1965/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no. 2, 1966, 194-197

TOPIC TAGS: nuclear spectroscopy, nuclear structure, excited state, half life, gamma ray, conversion electron, phonon, samarium

ABSTRACT: The authors have measured the lifetime of the 22.5 keV first excited state of Sm^{149} . The source was obtained by bombarding terbium with 680 MeV protons for 5 hours and separating the europium fraction 5 months later. Eu^{149} decays by electron capture to Sm^{149} . Delayed coincidences were recorded between the gamma rays from the 328 keV transition to the 22.5 keV level and conversion electrons from the decay of that level. The gamma rays were detected with an NaI crystal scintillator, and the conversion electrons, with a thin (0.5 mm) plate of anthracene. The halflife of the 22.5 keV level was found to be $(6.9 \pm 0.5) \times 10^{-9}$ sec, in agreement with the finding of O.C.Kistner, A.C.Li, and S.Monaro (Phys. Rev., 132, 1733 (1963)) and in disagreement with that of R.Leonard, S.Iha, and G.Lang (Bull.Amer.Phys.Soc., Ser.II, 8, No.1,

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ACC NR: AP6019605

85 (1963)). The nature of the low-lying levels of Sm^{149} is discussed. The authors favor the description given by the phonon model of L.S.Kislinger and R.A.Sorensen (Rev.Mod.Phys., 35, 853 (1963)), although that model predicts much too high a value for the quadrupole moment of the Sm^{149} ground state. From the reduced transition probabilities from the ground state to the different excited states, measured in the present work and by D.G.Alkhazov, K.I.Yerokhina, and I.Kh.Lemberg (Izv. AN SSSR. Ser. fiz., 27, 1363 (1963)), the root-mean-square deformation of Sm^{149} was calculated and found to be 0.13. That value coincides with the corresponding value for the even-even Sm^{148} core (derived from the reduced probability for the $0^+ \rightarrow 2^+$ transition) and confirms the phonon nature of the low-lying Sm^{149} levels. Orig. art. has: 1 formula and 2 figures.

SUB CODE: 20

SUBM DATE: 00

ORIG. REF: 008

OTH REF: 013

Card 2/2 *bfh*

POLYAKOV, A.G., dotsent

Study for developing an economical method of shaft sinking under the conditions present in the Churubay-Nura area of the Karaganda Basin. Izv. vys. ucheb. zav.; gor. zhur. no.12; 21-26 '61. (MIRA 16:7)

1. Karagandinskiy politekhnicheskiy institut. Rekomendovana kafedroy stroitel'stva gornyykh predpriyatiy. (Karaganda Basin--Shaft sinking)

POLYAKOV, A.G., dotsent

Ways to shorten the development period in mine building. Izv.
vys. ucheb. zav.; gor. zhur. no.10:29-34 '60. (MIRA 13:11)

1. Karagansinskiy politekhnicheskiy institut. Rekomendovana
kafedroy stroitel'stva gornykh predpriyatiy Karagandinskogo
politekhnicheskogo instituta.
(Mining engineering)

SMIRNOVA, G.N.; POLYAKOV, A.I.; ROGOVIN, Z.A.

Synthesis of cellulose derivatives containing 2,3-anhydro rings.
Vysokom. soed. 7 no.6:972-977 Je '65. (MIRA 18:9)

1. Moskovskiy tekstil'nyy institut.

L 9623-66 EWT(1) IJP(c) WW/GG SOURCE CODE: UR/0056/65/049/003/0760/0764
ACC NR: AP5024695
AUTHOR: ^{44,55} Polyakov, A. I.; ^{44,55} Yakovlev, G. I. 59
ORG: ^{44,55} Institute of Nuclear Physics of the Academy of Sciences, Kazakh SSR (Institut
yadernoy fiziki Akademii nauk Kazakhskoy SSR) 3
TITLE: Observation of pulsed nucleus-nucleus polarization
SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 49, no. 3, 1965,
760-764
TOPIC TAGS: ^{21, 44, 55} nuclear magnetic resonance, alkali metal, proton polarization, line in-
tensity, relaxation process, solvent action, hydrogen bonding
ABSTRACT: The authors have investigated double nuclear magnetic resonance in con-
centrated sodium, potassium, and calcium hypophosphate solutions by the method of
transient dynamic polarization of I. Solomon (Phys. Rev. v. 99, 959, 1955 and J. Chem.
Phys. v. 25, 261, 1956), using a flow-through measuring head described by J. Henequin
(Ann. d. Phys. v. 6, 949, 1961). The procedure and apparatus are described briefly.
The results show that with change in the intensity of the solvent line, the hypo-
phosphate proton-like intensities increase greatly, sometimes by a factor of three.
The experiments also show that polarization of the hypophosphate protons does not re-
sult from relaxation processes but appears at the instant when a radio-frequency pulse
is applied to the solvent protons, the characteristic time for the appearance of
polarization being much shorter than the transverse relaxation times of the solvent

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ACC NR: AP5024695

and hypophosphate protons. Polarization of the hypophosphate protons by the solvent protons is attributed to molecular association based on the hydrogen bond. The mechanism of the observed polarization is not explained. Orig. art. has: 4 figures and 1 formula.

SUB CODE: 20/ NP/ SUBM DATE: 27Apr65/ ORIG REF: 001/ CTH REF: 007

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Card 2/2

POLYAKOV, A.I.; DEREVITSKAYA, V.A.; ROGOVIN, Z.A.

Investigation of the possibility of preparing unsaturated compounds of cellulose by the Chugaev reaction. Vysokom. soed. 2 no. 3:386-389 Mr '60. (MIRA 13:11)

1. Moskovskiy tekstil'nyy institut.
(Cellulose)

POLYAKOV, A.I.

Method of determining the rate of blood coagulation. Fiziol.
zhur. 41 no. 4: 583-584 J1-Ag '55. (MLRA 8:10)

1. Kafedra fiziologii zhivotnykh Veterinarnogo instituta im.
N.E. Baubana, Kazan'

(BLOOD COAGULATION,
clotting time, determ.)

SREBNYY, M.A.; SAPITSKIY, K.F.; POLYAKOV, A.I.

Work practices of the designer and constructor groups in
Chistyakovantratsit Trust mines. Ugol' 36 no.10:38-40 0 '61.
(MIRA 14:12)

1. Trest Chistyakovantratsit kombinata Stalinugol'.
(Donets Basin--Coal mines and mining)

PETROV, V.A., kand. tekhn. nauk; EDEL'SHTEYN, M.I., kand. tekhn. nauk;
PROSKURINA, Yu.M., inzh.; POLYAKOV, A.I., inzh.; MOTOVILOV,
K.V., inzh.; PINI, V.Ye., inzh.

Optimum value of radial clearances for roller bearings of
railroad cars. Vest. TSNII MPS 22 no.7:44-47 '63. (MIRA 16:12)

ZHERNOVOY, A.I.; POLYAKOV, A.I.; YAKOVLEV, G.I.

Width of the nuclear magnetic resonance line in a flow transducer.
Izv. AN SSSR Ser. Fiz. 29 no.2:311-312 F '65.

Nonresonance nutation of nuclei in nuclear magnetic resonance.
Ibid.:313-314 (MIRA 18:3)

ZHELNOVOY, A.I.; POLYAKOV, A.I.; YAKOVLEV, G.I.

Effect of nuclear mutation in inhomogeneous magnetic fields.
Izv. AN SSSR Ser. fiz. 29 no.2:304-305 F '65.

(MIRA 18:3)

POLYAKOV, A.I.; KOT, G.A.

Distribution of thorium in the minerals of nepheline syenites
in the Lovozero Tundras. Geokhimiia no.1:73-85 Ja '65. (MIRA 18:4)

1. Institut geokhimii i analiticheskoy khimii imeni Vernadskogo
AN SSSR, Moskva.

SLEPINA, I.S.; POLYANOV, A.I.; RUGOVIN, I.A.

Some regularities in the nucleophilic substitution of various
cellulose esters with hydrohalides. *Vysokom. soed.* 7 no.2:199-
204 P '66. (MIRA 18:3)

1. Moskovskiy tekstil'nyy institut.

POLYAKOV, A.I.; KOSTETSKAYA, Ye.V.

Poikilitic sodalite syenites of the Lovozero alkali tundras;
some problems in petrology and geochemistry. Izv. AN SSSR.
Ser. geol. 30 no.6:16-25 Je '65.

(MIRA 18:6)

1. Institut geokhimii i analiticheskoy khimii im. V.I. Vernadskogo
AN SSSR, Moskva.

POLYAKOV, A.I.; ROGOVIN, Z.A.

Synthesis of new derivatives of cellulose. Part 22: Synthesis of chlorocellulose and its conversion products. Preparation of amino and nitrile cellulose. Vysokom.sped. 5 no.1:11-17 Ja '63.. (MIRA 16:1)

1. Moskovskiy tekstil'nyy institut.
(Cellulose)

ROGOVIN, Z.A.; POLYAKOV, A.I.

Synthesis of stereoisomeric derivatives of cellulose. Vysokom.sped.
5 no.4:629 Ap '63. (MIRA 16:5)

(Cellulose) (Isomers)

BERKOVA, N.M.; SIMONOV, Ye.D., red.; GIPPENREYTER, Ye.B., red.;
KIZEL', V.A., red.; KUZ'MIN, K.K., red.; LETAVET, A.A., red.;
POLYAKOV, A.I., red. p ROTOTAYEV, P.S., red.; ~~FILIMONOV~~, L.N.,
red.; KHRGIAN, A.Kh., red.; YUKHIN, I.V., red.; KONOVALYUK,,
I.K., mlad. red.; GOLITSYN, A.V., red. kart; ARDANOVA, N.P.
tekhn. red.

[Conquered summits; Soviet alpinism between 1958 and 1961, Po-
bezhdennye vershiny; sbornik sovetskogo al'pinizma, 1958-1961.
Moskva, Geografiz, 1963. 406 p. (MIRA 16:6)
(Mountaineering)

POLYAKOV, A.I.; ROGOVIN, Z.A.; DEREVITSKAYA, V.A.

On the possibility of preparing unsaturated derivatives of cellulose by the Chugaev reaction. Part 2. Vysokom.sped. 5 no.2:161-163
F '63. (MIRA 16:2)

1. Moskovskiy tekstil'nyy institut.
(Cellulose xanthates) (Unsaturated compounds)

OKOROKOV, G.N., kand.tekhn.nauk; BOYARSHINOV, V.Ya., kand.tekhn.nauk; SHAMIL', Yu.P. inzh.; LEYBENZON, S.A., inzh.; PAKHOMOV, A.I., inzh.; POLYAKOV, A.I., inzh.

Improving the macrostructure of ShKh15 steel made in a vacuum arc
furnace. Stal' 23 no.1:30-34 Ja '63. (MIRA 16:2)

1. Dnepropetrovskiy staleplavil'nyy zavod vysokokachestvennykh i
spetsial'nykh staley i Tsentral'nyy nauchno-issledovatel'skiy institut
chemnoy metallurgii.

(Steel—Electrometallurgy) (Vacuum metallurgy)

POLYAKOV, A.I., aspirant

Temperature conditions of car axles with roller bearings. Vest.-
TSNII MPS 22 no.5:39-42 '63. (MIRA 16:8)
(Car axles--Testing) (Roller bearings)

VOLKOV, V.P.; POLYAKOV, A.I.; KARAKHANOVA, M.I.; VORONINA, L.P.

Petrochemical characteristics and associations of nepheline syenite accessory minerals of the differentiated complex of the Lovozero alkaline massif. Geokhimiya no.8:656-665 '61. (MIRA 17:3)

1. Institut geokhimii i analiticheskoy khimii imeni V.I.Vernadskogo AN SSSR, Moskva.

KRIGER, S.M.; POLYAKOV, A.I.

Results of the treatment of pyodermitis with determination of
the pyococcal sensitivity to antibiotics. Vest. arm. i ven. 37
no.6:64-65 Je '63. (MIRA 17:6)-

1. Kozhno-venerologicheskoye oddeleniye Ob'yedinennoy polikliniki
Ministerstva putey soobshcheniya ~~nachal~~ 'nik - zaslužennyy vrach
KSSSR A.G. Sarkisov, nauchnyy konsul'tant - prof. V. Ya. Arutyunov.

POLYAKOV, A. I., inzh.; SRYVKOV, S. V., inzh.

Adjustment of boilers operating on Nazarovo coal. Energetik
12 no.4:2-4 Ap '64. (MIRA 17:7)

KHOLMERADOV, N.; KOZLOVA, Yu.S.; POLYAKOV, A.I.; ROGOVIN, E.A.

possibility of preparing nitrodeoxycellulose by nucleophilic
substitution. Vysokom. soed. 6 no. 5:963 Vy '4. (MIRA 17:6)

SREBNYY, Mikhail Aleksandrovich; DOLIDEN, Konstantin Shalovich;
BESEDA, Ivan Profir'yevich; ~~POLYAKOV, Aleksey Ivanovich;~~
GRABILIN, Yu.N., ed. red.

[World record for making a haulage drift (making 1,051 m.
of drift in one month at Mine No.103 of the Chistiakov-
antratsit Trust)] Kirovoi rekord provedeniia otkatochnogo
shtreka (1951 m shtreka v mesiats na shakhte no.103 tresta
Chistiakovantratsit). Moskva, Tsentr. in-t tekhn. in-t
tekhn. informatsii ugol'noi promyshl., 1962. 22 p.
(MIRA 17:7)

POLYAKOV, A.I. • KRIGER, S.M.

Medicocosmetic aid at the dermatology ward of a polyclinic.
Vest. derm. i ven. 37 no.12:57-59 D '63 (MIRA 18:1)

1. Kozhnoye otdeleniye ob'yedinennoy polikliniki (nachal'nik
A.G. Sarkisov) Ministerstva putey soobshcheniya.

POLYAKOV, A.I.; KOT, G.A.

Geochemistry of thorium in the nepheline syenites of the Kola Peninsula.
Geokhimiia no.6:505-517 Je '64. (MIRA 18:7)

1. Institut geokhimii i analiticheskoy khimii imeni Vernadskogo AN
SSSR, Moskva.

POLYAKOV, A.S.; KRUGLOV, A.M.

Remission of gonorrhea by Bicillin-3 in therapy for gonorrhea in men.
Vest. dermat. i ven. 38 no.9:63-64 S '64.

(MIRA 18:1)

1. Kozhno-venereologicheskoye otделение Ob"yedinennoy polikliniki
(nachal'nik B.A.Ivanov) Ministerstva putey soobshcheniya, Moskva.

KHOLMERADOV, N.; KOZLOVA, Ya.S.; POLYAKOV, A.I.; ROZIN, L.

Synthesis of tosylnitrodecylcellulose. Vysokom. speed. 7 km.
439-442 Mr '65. (MIRA 1965)

1. Moskovskiy telstil'nyy institut.

ACCESSION NR: AT4017409

S/0000/63/000/000/0048/0054

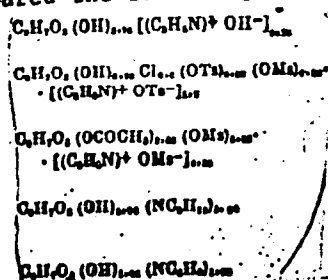
AUTHOR: Kryazhev, Yu. G.; Polyakov, A. I.; Rogovin, Z. A.

TITLE: Synthesis of new derivatives of cellulose and other polysaccharides.
XXXIV. Synthesis of cellulose derivatives with nitrogenous heterocyclic rings.

SOURCE: Tsellyuloza i yeye proizvodny*ye, sbornik statey (Cellulose and its derivatives). Moscow, 1963, 48-54

TOPIC TAGS: cellulose, polysaccharide, cellulose derivative, nitrogenous cellulose derivative, heterocyclic cellulose derivative, sandwich polymer, grafted copolymer

ABSTRACT: The authors prepared the following five nitrogenous, heterocyclic cellulose derivatives:



Card 1/2

ACCESSION NR: AT4017409

in which Ms and Ts stand for the mesyl and tosyl esters of cellulose, respectively, by alkylating these esters with pyridine, piperidine and pyrrolidine and by the condensation of dialdehyde cellulose with the quaternary salt of 2-methyl-5-ethylpyridine. Alkylation and condensation reactions were also used to prepare grafted cellulose copolymers of the sandwich type with poly-2-methyl-5-vinylpyridine. The reaction conditions are described in detail and data on the chemical composition, degree of polymerization and cation exchange activity of the products are tabulated. Orig. art. has: 2 tables and 3 chemical equations.

ASSOCIATION: Moskovskiy tekstil'nyy institut (Moscow Textile Institute)

SUBMITTED: 24Apr62

DATE ACQ: 06Jan64

ENCL: 00

SUB CODE: OC, MT

NO REF SOV: 005

OTHER: 003

Card 2/2

POLYAKOV, A. I.

Degasification of auxiliary accessories by means of bore holes drilled from airways. Ugol' Ukr. 6 no.11:41 N '62.

(MIRA 15:12)

1. Nachal'nik tekhnicheskogo otdela Chistyakovskogo tresta predpriyatiy ugol'noy promyshlennosti Donbassa Ministerstva ugol'noy promyshlennosti SSSR.

(Mine gases)

POLYAKOV, A.I.; KRIGER, S.M.

Dichlorodiphenyltrichloroethane in the treatment of males with
trichomonal urethritis. Vest.derm.i ven. no.7:80 '61.

(MIRA 15:5)

1. Iz kozhno-venerologicheskogo otdeleniya Ob'yedinennoy poli-
kliniki Ministerstva putey soobshcheniya (nachal'nik - zaslužhennyy
vrach RSFSR A.G. Sarkisov, nauchnyy konsul'tant - prof. I.M.
Pezdominskiy).

(URETHRITIS) (DDT) (TRICHOMONIASIS)

SREBNYY, M.A.; POLYAKOV, A.I.

Continuous combined brigades in the mines of Chistiakovantratsit
Trust. Ugol' Ukr. 6 no.5:26-28 My '62. (MIRA 15:11)

1. Upravlyayushchiy Chistyakovskim trestom predpriyatiy ugol'noy
promyshlennosti Donbassa Ministerstva ugol'noy promyshlennosti
SSSR (for Srebnyy). 2. Nachal'nik tekhnicheskogo otdela Chistyakovskogo
tresta predpriyatiy ugol'noy promyshlennosti Donbassa Ministerstva
ugol'noy promyshlennosti SSSR (for Polyakov).
(Donets Basin--Coal mines and mining)

POLYAKOV, A.I., inzh.; SAPITSKIY, K.F., kand.tekhn.nauk

Effect of blocks left in the mined-out areas on gas emission
in the workings of overlaying seams. Ugol'.prom. no.4:80-83
Jl-Ag '62. (MIRA 15:8)

1. Chistyakovskiy trest predpriyatiy ugol'noy promyshlennosti
Donbassa Ministerstva ugol'noy promyshlennosti SSSR (for Polyakov).
2. Donetskii politekhnicheskii institut (for Sapitskiy).
(Mine gases)

GERASIMOVSKIY, V.I.; POLYAKOV, A.I.

Sphene-amphibole iolite-melteigite from the Lovozero massif.
Dokl. AN SSSR 143 no.5:1179-1181 Ap '62. (MIRA 15:4)

1. Institut geokhimii i analiticheskoy khimii im. V. I.
Vernadskogo AN SSSR. Predstavleno akademikom A.P.Vinogradovym.
(Lovozero tundras--Minerals)

POLYAKOV, A.I., inzh.; NASEDKIN, V.V., inzh.; SHCHUKA, A.I., inzh.

Increase in the operational reliability of LaMont boilers.

Energetik 9 no.3:6-7 Mr '61.

(MIRA 14:7)

(Boilers)

POLYAKOV, A.I.; VOLYNETS, M.P.

Thorium distribution in a series of ultrabasic alkaline rocks of the Kola Peninsula. Geokhimiia no.5:426-432 '61. (MIRA 14:5)

I. V. I. Vernadsky Institute of Geochemistry and Analytical Chemistry, Academy of Sciences U.S.S.R., Moscow.
(Kola Peninsula--Rocks, Igneous)
(Thorium)

POLYAKOV, A.I.; KRIGER, S.M.

Phenoxypenicillin in the treatment of acute uncomplicated gonorrhea in males. Vest.derm.i ven. 34 no.9:71 '60. (MIRA 13:11)

1. Iz kozhno-venerologicheskogo otdeleniya Ob'yedinennoy polikliniki Ministerstva putey soobshcheniya (nach. - zasluzhennyy vrach RSFSR A.G. Sarkisov, nauchnyy konsul'tant - prof. I.M. Porudominskiy).

(PENICILLIN)

(GONORRHEA)

POLYAKOV, A.I.; DEREVITSKAYA, V.A.; ROGOVIN, Z.A.

Synthesis of new derivatives of cellulose and other polysaccharides.
Part 4: Synthesis of cellulose esters with α -amino acids,
Vysokom.soed. 3 no.7:1027-1030 J1 '61. (MIRA 14:6)

1. Moskovskiy tekstil'nyy institut.
(Cellulose esters) (Amino acids)

POLYAKOV, A.I.

Russian petroleum monopolies on the eve of the First World War.
Trudy LKI 24:123-132 '59. (MIRA 14:9)

1. Kafedra politicheskoy ekonomii Leningradskogo korablestroitel'-
nogo instituta.

(Petroleum industry)

18 8310

2504h

S/081/61/000/010/020/029
B117/B203

AUTHORS: Polyakov, A. I., Solodov, S. N.

TITLE: Protection of steel and aluminum alloy from corrosion with
a volatile inhibitor, monoethanol amine benzoate

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 10, 1961, 289-290,
abstract 104 241 (10I241). [Zh. zap.] Mosk. gos. ped.
un-ta im. V. I. Lenina, no. 146, 1960, 206-216)

TEXT: It was found, that monoethanol amine benzoate is an effective volatile
inhibitor of atmospheric corrosion of the anodic type for steel (oxidized,
phosphatized, passivated, chromated, and painted with 460 (4B0) color). The
joint action of inhibitor and lubricant is more effective than the action of
one of these substances alone. [Abstracter's note: Complete translation.] X

Card 1/1

GERASIMOVSKIY, V.I.; POLYAKOV, A.I.; FEYGIN, Ya.M.

Structure of the differentiated lujavrite-foyaite-urtite rock
complex of the Lovozero Massif. Dokl. AN SSSR 136 no. 3:700-
703 Ja '61. (MIRA 14:2)

1. Institut geokhimi i analiticheskoy khimii imeni V.F.
Vernadskogo. Predstavleno akademikom A.P. Vinogradovym.
(Lovozero tundras--Nepheline syenite)

POLYAKOV, A.I.; SOLODOV, S.N.

Protection of steel and aluminum alloys from corrosion by a
volatile monoethanolamine benzoate inhibitor. Uch. zap. MGPI
no.146:206-216 '60. (MIRA 15:4)
(Steel--Corrosion) (Aluminum alloys--Corrosion)

L 33610-65 EEC-4/EEG(k)-2/EWT(d)/EWT(1)/EEG(t) Pg-4/Pk-4/Pl-4/Po-4/Pq-4/Pe-4
IJP(c)

ACCESSION NR: AP50/5958

B/0048/65/029/002/0304/0305

AUTHOR: Zhernovoy, A.I.; Polyakov, A.I.; Yakovlev, G.I.

TITLE: Effect of nuclear nutation in inhomogeneous magnetic fields /Report, 14th Annual Conference on Nuclear Spectroscopy held in Tbilisi, 14-22 Feb 1964./

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v.29, no.2, 1965, 304-305

TOPIC TAGS: nuclear magnetic resonance, magnetic field measurement, inhomogeneous magnetic field, alternating magnetic field

ABSTRACT: This paper is concerned with the nuclear magnetic resonance measurement of magnetic fields by means of a head employing a flowing working substance (A.I. Zhernovoy, Yu.S. Yegorov and G.D. Latyshev, Inzh.-fiz. zhur. 1, No. 9, 123, 1958; Priroda i tekhnika eksperimenta No. 5, 71, 1958). In instruments for this purpose it is necessary to effect a rotation by at least 270° of the mean nuclear magnetization of the working substance by interaction with a resonant high-frequency field in the presence of a static magnetic field. This is difficult to achieve because of the inhomogeneity of the applied magnetic field. The authors have found that realization of the requisite degree of magnetization reversal is greatly facilitated by

Card 1/2

L 33610-65

ACCESSION NR: AP5015958

application of an alternating magnetic field of amplitude equal to the inhomogeneity of the constant magnetic field and frequency such that 5 to 10 cycles are completed during the passage of a particle of the working substance through the field. This phenomenon is briefly discussed theoretically and some experimental results are presented. The effect is sufficiently sensitive to the amplitude of the alternating field that it can be employed to estimate the inhomogeneity of the constant field. In the operation of the nuclear magnetic resonance head it is not only desirable to keep the "nutational relaxation time" (which depends on the inhomogeneity of the field) as small as possible but also to keep the time spent by a particle of the working substance in the field short compared with the relaxation time. Orig.art.has: 2 formulas and 3 figures.

ASSOCIATION: none

SUBMITTED: OO

ENCL: OO

SUB CODE: EM,NP

NR REF SOV: 002

OTHER: 000

Card 2/2

L 33608-65 EWT(l)/EEC(t) Feb IJP(c)

ACCESSION NR: AP0005960

S/0048/65/029/002/0311/0312

AUTHOR: Zhernovoy, A.I.; Polyakov, A.I.; Yakovlev, G.I.

TITLE: Concerning the width of the nuclear magnetic resonance line in a flow probe
/Report, 14th Annual Conference on Nuclear Spectroscopy held in Tbilisi, 14-22 Feb
1964/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v.29, no.2, 1965, 311-312

TOPIC TAGS: nuclear magnetic resonance, magnetic field measurement, inhomogeneous
magnetic field

ABSTRACT: This paper is concerned with the nuclear magnetic resonance measurement of magnetic fields by means of a head employing a flowing working substance. It is pointed out that the nuclear magnetic resonance line is broadened as a result of saturation by the high-frequency field, distortion of the high-frequency field in the region of the head, and inhomogeneities of the static field in the directions parallel and perpendicular to the flow of the working substance. These effects are discussed very briefly and some experimental results are presented. In order to obtain optimal results (minimum width of the nuclear magnetic resonance line) it is

Card1/2

L 33608-65

ACCESSION NR: AP5005980

desirable to orient the head so that the flow of the working fluid is parallel to the gradient of the magnetic field and to select optimal values of the flow rate and the strength of the high-frequency field. Orig.art.has; 5 formulas, 2 figures and 1 table.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: EM,NP

NR REF SOV: 004

OTHER: 002

Card 2/2

L 33607-65 EEC-l/EEG(b)-2/EWG(j)/EEG(k)-2/EWA(h)/EWA(k)/EWP(k)/EWT(d)/EWT(l)/
EEG(t)/FBD/T/EWA(m)-2 Pf-l/Pg-l/Pi-l/Pk-l/Pl-l/Pn-l/Po-l/Pq-l/PeB IJP(c)

WQ

ACCESSION NR: AP5005181

S/0048/65/028/002/0313/0314

AUTHOR: Zhernovoy, A.I.; Polyakov, A.I.; Yakovlev, G.I.

TITLE: Nonresonant nutation in nuclear magnetic resonance ²¹ Report, 14th Annual
Conference on Nuclear Spectroscopy held in Tbilisi, 14-22 Feb 1964 ⁸¹
³

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v.29, no.2, 1965, 313-314

TOPIC TAGS: nuclear magnetic resonance, magnetic field measurement, maser ²⁵
^{9m}

ABSTRACT: This paper is concerned with nuclear magnetic resonance measurement of uniform magnetic fields by means of a maser employing a flowing working medium (H. Benoit, Ann.Physik, 4, No.11-12, 1439, 1959). The alignment of nuclear spins by non-resonant nutation is discussed briefly and a simple maser based on this principle is described even more briefly. This maser operated in a 35 Oe field and employed water as the working substance. The protons were polarized in the 8 kOe field of a permanent magnet and the water was caused to flow through a region in which the magnetic field, transverse to the flow, changed sign twice. Orig.art.has: 3 formulas and 2 figures.

Card 1/2

L 33607-65

ACCESSION NR: AP5005181

ASSOCIATION: none

SUBMITTED: 00

NR REF SOV: 001

ENCL: 00

OTHER: 001

SUB CODE: EM,NP

Card 2/2

L 13603-66 EWP(e)/EWT(m)/EWP(t)/EWP(k)/EWP(z)/EWP(b) JD
 ACC NR: AP6002869 SOURCE CODE: UR/0286/65/000/024/0030/0030

INVENTOR: Voyarshinov, V. A.; Okorokov, G. N.; Polyakov, A. I.;
Nikulin, A. A.; Bochkov, D. A.

ORG: none

TITLE: A method of heating a liquid-metal bath. Class 18, No. 176935.
 [announced by the Central Scientific Research Institute of Ferrous
 Metallurgy im. I. P. Bardina (Tsentral'nyy nauchno-issledovatel'skiy
 institut chernoy metallurgii)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 24, 1965, 30

TOPIC TAGS: metal, metal melting, vacuum melting, arc melting,
 magnetically controlled arc

ABSTRACT: This Author Certificate introduces a method of heating a
 metal bath in a vacuum arc furnace. In order to obtain an improved
 crystal structure in the ingot, the electric arc is moved on the
 surface of the bath under the effect of differently oriented alter-
 nating magnetic fields.

[WW]

SUB CODE: 11/ SUBM DATE: 29Jul63/ ATD PRESS: 4186

vacuum melting

Cord 1/1

UDC: 669.187.26

L 06140-67 EWP(m)/HWT(1)/EWT(m) WW

ACC NR: AP6031171

SOURCE CODE: UR/0361/66/000/002/0061/0068

AUTHOR: Polyakov, A. I.; Yakovlev, G. I.

33

13

ORG: none

19

TITLE: Nonresonant inversion of nuclei in a fluid stream

SOURCE: AN KazSSR. Izvestiya. Seriya fiziko-matematicheskikh nauk, no. 2, 1966, 61-68

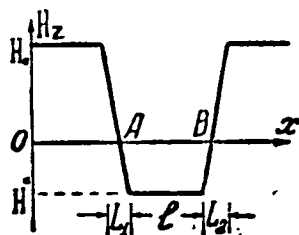
TOPIC TAGS: nuclear magnetic moment, nuclear magnetic resonance

ABSTRACT: A method of producing an almost complete reversal of nuclear magnetic moments in a fluid moving at relatively small velocities is described. A previously polarized liquid moves along the x -axis. After passing the point A , the net magnetization vector of the fluid is turned relative to the external field by a certain angle α . At the point B the net magnetization is somewhat smaller in magnitude because of relaxation. The relaxation times parallel and perpendicular to the external field are different, however, so that the magnetization vector after point B is at an angle β which is in general different from α . Experimental verification of this effect is obtained and practical applications are suggested. Orig. art. has: 8 formulas, 7 figures.

Card 1/2

L 06140-67

ACC NR: AP6031171



SUB CODE: 20/

SUBM DATE: 14Apr65/

ORIG REF: 002/

OTH REF: 013

Card 2/2 MLE

ACC NR: AR6020939 SOURCE CODE: UR/0137/66/000/002/V061/V061

AUTHOR: Shcherbakov, A. I.; Nikulin, A. A.; Okorekov, G. N.; Bochkov, D. A.;
 Boyarshinov, V. A.; Volokhonskiy, L. A.; Polyakov, A. I. 42
 41

TITLE: The effect of the electric power parameters on a vacuum arc furnace on ingot crystallization conditions 13

SOURCE: Ref. zh. Metallurg, Abs. 2V396

REF SOURCE: Elektrotermiya. Nauchno-tekhn. sb., vyp. 45, 1965, 34-37

TOPIC TAGS: vacuum arc furnace, alternating magnetic field, constant magnetic field

TRANSLATION: An investigation was made of the effect of electric parameters of a vacuum arc furnace on crystallization conditions of an ingot, as well as the possibility of influencing the crystallization process with the use of constant and alternating magnetic fields. An analytic and experimental correlation between these parameters and the crystallization of an ingot was determined. The relative depth h/D of a liquid wall was equivalent for molds of different dimensions by maintaining the equality $I/D = \text{constant}$. The value I/D suitable for a metal with a small 2-phase region extension may serve as the criterion for selection of the electrical melting cycle. For a metal with an extended 2-phase region it is necessary to decrease the ingot diameter and to decrease the operating current as much as possible in order to prevent segregation.

Card 1/2 UDC: 621.385.22-982.001.5

1. 4678-47

ACC NR: AR6020939

tion defects. The use of an alternating magnetic field prevents structural defects, characteristic of ingots melted in a constant magnetic field, and is a promising method for arc stabilization during vacuum arc melting. 3 figures. G. Lyubimova.

SUB CODE: .15 ,20

fv

Card 2/2

BALASHOV, V.N.; POLYAKOV, A.K.

Experimental radiometric assaying in an antimony mine.
Sov.geol. 5 no.1:164-169 Ja '62. (MIRA 15:2)

1. Sredneaziatskiy nauchno-issledovatel'skiy institut
geologii i mineral'nogo syr'ya.
(Ores--Sampling and estimation)
(Antimony ores)

POLYAKOV, A.K.

Typomorphic minerals in nepheline syenites in the Luyavrurt
massif. Uzb.geol.zhur. no.2:45-47 '59. (MIRA 12:8)

1. SAIGIMS.

(Kola Peninsula--Mineralogy)

POLYAKOV, A.K.
MURASHEV, A.M.; POLYAKOV, A.K.; SLAVOROSOV, A.Kh., red.izd.-va; ZAZUL'SKAYA,
V.F., tekhn.red.

[A collection of problems in mine surveying; a textbook for students
in mining schools specializing in "Mine surveying."] Sbornik zadach
po marksheiderskomu delu; uchebnoe posobie dlia uchashchikhsia gornyykh
tekhnikumov spetsial'nosti "Marksheiderskoe delo." Moskva, Ugle-
tekhnizdat, 1957. 216 p. (MIRA 11:2)

(Mine surveying--Problems, exercises, etc.)

POLYAKOV, A.K.; SMIRNOV, V.N.

Results of industrial test operations on using the ~~gamma-gamma~~
method of sampling in mines and the ore dressing plant of a
Central Asian complex ore enterprise. Uch. zap. SAIGIMSa
no.8:73-83 '62. (MIRA 17:1)

1. Sredneaziatskiy nauchno-issledovatel'skiy institut geologii
i mineral'nogo syr'ya, Tashkent.

BABAYEV, K.L.; POLYAKOV, A.K.

Problems in mining geophysics. Uch. zap. SAIGIMSa no.8:3-4 '62.
(MIRA 17:1)

1. Srednaziatskiy nauchno-issledovatel'skiy institut geologii
i mineral'nogo syr'ya, Tashkent.

POLYAKOV, A.K.

State of and ways of introducing geophysical methods of prospecting
at mining enterprises. Uch. zap. SAIGIMSa no.8:15-26 '62.

(MIRA 17:1)

1. Sredneaziatskiy nauchno-issledovatel'skiy institut geologii i
mineral'nogo syr'ya, Tashkent.

MAMOKHIN, I.I.; MORGUNOV, V.S.; POLYAKOV, A.K.; RUDENKO, Yu.P.

Using the gamma-ray scattering method in Karamazar complex ore
mines. Uch. zap. SAIGIMSa no.8:63-71 '62. (MIRA 17:1)

1. ATRU i Sredneaziatskiy nauchno-issledovatel'skiy institut
geologii i mineral'nogo syr'ya, Tashkent.

POLYAKOV, A.K.; SMIRNOV, V.N.

Gamma-gamma sampling in lead and zinc mines of the Maritime Territory. Uch. zap. SAIGIMSa no.8:89-98 '62. (MIRA 17:1)

1. Sredneazistskiy nauchno-issledovatel'skiy institut geologii i mineral'nogo syr'ya, Tashkent.

POLYAKOV, A.K.

MEDYANTSEV, A.N., inzhener; POLYAKOV, A.K., tekhnik.

Working a thick layer of coal under a Karaganda streetcar line.
Trudy VNIMI no.29:40-43 '54. (MLRA 8:3)
(Karaganda Basin--Subsidences (Earth movements))

POLYAKOV, A.K.

Ferrite-transistor triggers using one transistor. Trudy MEI
no.41:113-120 '62. (MIRA 16:7)

(Pulse circuits)

(Electronic computers—Circuits)

POLYAKOV, A.K.

Exploit small deposits to increase the output of mercury. Uch.
zap.SAIGIMS no.5:149-151 '61. (MIRA 15:11)
(Mercury mines and mining)

POLYAKOV, A. Kh., inzh.

Air resistance to trains passing through subway tunnels.

Transp. stroi. 8 no.8:23-24 Ag '58. (MIRA 11:10)

(Railroads--Train speed) (Subways) (Tunnels)

POLYAKOV, A-L.																									
Change of the composition of the electrode coating OMM-1 G. I. Bukreev and A. L. Polyakov. <i>Astrogen- nos</i> <i>Relu</i> 8, No. 4, 20-2(1937).--<i>Chem. Zentr.</i> 1938, 1, 4231.-- In the welding of a steel contg. C 0.11, Si 0.11 and Mn 0.44% the use of a 4-mm.-thick electrode contg. C 0.24, Si traces and Mn 0.40% having a coating made up of Mn ore (20% Mn), 30, quartz 8.4, Fe oxide 4.4 and lamp- black 3 parts by wt. gave the most satisfactory results as regards strength of the weld seam. M. G. Moore																									
ASME, S.E.A. METALLURGICAL LITERATURE CLASSIFICATION																									

ZHURAVLEV, L.T.; KISELEV, A.V.; MAYDINA, V.P.; POLYAKOV, A.L.

Determination of small amounts of water and hydroxyl groups
by deuterium exchange and mass spectrometry. Zhur. fiz. khim.
37 no.9:2054-2061 S '63. (MIRA 16:12)

1. Institut fizicheskoy khimii AN SSSR i Moskovskiy gosudarstvennyy
universitet imeni Lomonosova.

POLYAKOV A.L.

Utilization of methanol and ether-aldehyde fractions.
A. L. Polyakov and S. D. Skvortsov. *Gidroliz. i. Lesokhim.*
Pril. 8, No. 3: 21-4 (1955). -- The MeOH fraction, as a by-
product of EtOH production at hydrolytic and sulfite-alcohol
plants, contg. 70-80% of MeOH, 10-20% of EtOH, and
5-10% of ethers and aldehydes, can be fractionated in a
continuous process. The distd. mass is neutralized with
NaOH, pumped to a sedimentation tank where floating oils
sep., and led from there into 3 columns operating in series,
the first one being ether-aldehyde, the second exhausting,
and the third MeOH column. Ether-aldehyde fraction
is then sent through 2 columns. At the top of the first one
70% MeCHO is recovered. The concn. of MeCHO is
higher the lower the temp. at the top of the column. At
the top of the second column a mixt. of ether and aldehyde
is recovered; this material is used as a solvent. In the
center of the second column MeOH is recovered in a yield of
50-53%.
T. Jurek

MT ①

MA 22

POKHODKOVA, D. I.
POY, S. A., FROLOV, D. P. and POLYAKOVA, A. I.

"Sound Generation by Spark and Corona Discharges in Water."

paper presented at the 4th All-Union Conf. on Acoustics, Moscow, 26 May - 2 Jun 58.

ZHURAVLEV, L.T.; ZUBAREV, A.F.; POLYAKOV, A.L.; TITOV, L.N.

Electrical manometer continuously recording low gas and vapor pressures. Zhur. fiz. khim. 39 no. 1:236-239 Ja '65
(MIRA 19:1)

1. Institut fizicheskoy khimii AN SSSR i Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova. Submitted September 4, 1963.

L 04638-67 EWT(1)/EWT(m)/EWP(t)/ETI IJP(c) JD/AT

ACC NR: AP6024391

SOURCE CODE: UR/0020/66/169/002/0328/0331

AUTHOR: Chupakhin, M. S.; Bibikova, Ye. V.; Polyakov, A. L.

ORG: Institute of Geochemistry and Analytical Chemistry im. V. I. Vernatskiy, Academy of Sciences SSSR (Institut geokhimii i analiticheskoy khimii Akademii nauk SSSR)

TITLE: Formation of thermionic ions with the aid of emitters

SOURCE: AN SSSR. Doklady, v. 169, no. 2, 1966, 328-331

TOPIC TAGS: ion emission, thermionic emission, semiconducting film, oxide

ABSTRACT: This is a continuation of work by one of the authors (Chupakhin, Zhakh v. 17, 665, 1962 and v. 18, 1059, 1963, and earlier) dealing with enhanced emission of ions from various substances by using emitters with sorbent materials. A three-ribbon thermionic ion source was used to compare the ionizing ability of three widely used sorbents in mass spectroscopy, namely silica gel, aluminum-silica gel, and zirconium-silica gel. The main purpose of the investigation was to determine the mechanism whereby ionization is produced with the aid of emitters, since the high efficiency of the emitters seems to contradict the Langmuir-Saha equation. The indicator elements used were lead and zinc, controlled batches of which were deposited on sorbents made of nitric acid solutions of their salts. The evaporator temperature ranged from 1400 - 1700°, depending on the type of sorbent and on the heater material. It is concluded that during the heating of the evaporator, an emitter layer is produced from the sorbent, and simultaneously the atoms of the investigated element dif-

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fuse into this layer. The emitter layer consists of oxides which are normally insulators, and acquire semiconducting properties at high temperatures, of the barrier-layer type. The surface of the emitter layer and the surface of the heater form a capacitor with high field intensity, thus enhancing the emission of ions. Various aspects of the mechanism are described in some detail. This interpretation does not contradict the Saha-Langmuir equation. The authors thank Academician A. B. Vinogradov for interest in this research. This report was presented by Academician A. B. Vinogradov 29 October 1965. Orig. art. has: 4 figures and 4 formulas.

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POLYAKOVA, A. L.

. "On the Relaxation Absorption of Sound Waves of Finite Amplitude."

paper presented at the 4th All-Union Conf. on Acoustics, Moscow, 26 May - 2 Jun 58.